REQUEST FOR PROPOSALS

ESTABLISHMENT OF FISHERY BASELINES FOR THE

SALTON SEA ECOSYSTEM

Issued by:
Salton Sea Science Office

Responses Due: September 21, 2001

STUDY SITE

The Salton Sea is the largest body of water in California. It is a hypersaline lake located in a closed desert basin east of Los Angeles and San Diego. The Sea was initially formed in 1905-1907 by flooding on the Colorado River which breached an irrigation control structure allowing virtually the full flow of the river into the Salton Basin. The Sea's current existence is primarily due to agricultural drainage from the Imperial, Coachella, and Mexicali Valleys; smaller volumes of municipal effluent and storm water runoff also flow to the Sea.

The aquatic ecosystem of the Salton Sea is extremely eutrophic and supports highly productive fish populations. The Sea and its adjacent wetlands are important components of the Pacific Flyway, providing habitat and seasonal refuge to millions of birds of hundreds of species. Several endangered species, including the Yuma clapper rail inhabit the Salton Sea ecosystem.

The Salton Sea ecosystem is an ecosystem under stress as evidenced by periodic large-scale die-offs of fish and of birds. A variety of diseases have been diagnosed as causes of the bird mortality and several pathogenic microbes and parasites have been isolated from sick and dead fish. Also, increasing salinity (currently about 44 ppt) may be threatening the reproductive ability of some fish species. High nutrient loading creates high productivity but also causes frequent algal blooms that contribute to periods of low oxygen and possibly blooms of toxic algae. Selenium (derived from the Colorado River water used to irrigate the agricultural areas of the basin) enters this waterbody and is found in elevated levels within bottom sediments and some biota. Pesticide and metal residues in Salton Sea sediments and the use of agricultural chemicals that reach irrigation drains leading to the Sea may also contribute to the overall ecosystem stress.

PROJECT BACKGROUND

Acting under authority of the Secretary, the Department of the Interior, in concert with the State of California and other stakeholder agencies, has initiated a National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) process and scientific activities to guide those processes in the determination of an appropriate remediation strategy for the Salton Sea. The Secretary designated the US Bureau of Reclamation (USBR) as the lead agency for NEPA purposes. The Salton Sea Authority (SSA) is the lead agency for CEQA. The SSA is a joint powers agency chartered by the State of California and is comprised of the counties of Imperial and Riverside, the Imperial Irrigation District, and the Coachella Valley Water District. An independent Salton Sea Science Office serves the Salton Sea Restoration Project by providing focused scientific input to meet the needs of the USBR and SSA in developing management actions leading to the restoration of the Salton Sea.

SCOPE OF WORK

ISSUE BACKGROUND

Maintaining a viable sport fishery is one of the five goals of the Salton Sea Restoration Project. That goal is also closely associated with two of the other goals, those to:

- Restore recreational uses at the Sea; and

- Provide a safe, productive environment at the Sea for resident and migratory birds and endangered species.

The sport fishery has in the past provided a major recreational use of the Sea and the high productivity of the fishery provides a food base for large numbers of fish-eating birds, including tens of thousands of pelicans. The sport fishery of the Salton Sea is comprised of four species, Orange mouth corvina (*Cynoscion xanthulus*), gulf croaker (*Bardiella icistius*), sargo (*Anisotremus davidsoni*), and tilapia (*Oreochromis mossambicus*). Tilapia and gulf croaker are the primary forage fish for the pisciverous birds of the Sea.

Because of the importance of the fishery of the Salton Sea as a parameter for evaluation of the status of the Sea relative to project goals it is critical that rigorous, time sensitive indices be established for monitoring changes in the fishery. Those changes may result from the naturally changing environment of the Sea (i.e., increasing salinity); management actions associated with the restoration program that alter the physical environment (i.e., reduced salinity or eutrophication) or structurally alter the environment (i.e., dikes and impoundments); from sport fishing (i.e., impacts of take); from fish kills and other factors such as foraging by birds, and from external factors such as water transfers that could reduce the volume and rate of flows entering the Salton Sea. In addition, the biomass of fish populations within the Sea must be established as a basis for judgments relative to the potential commercial harvest of tilapia and perhaps gulf croaker.

A two year reconnaissance investigation of the Salton Sea fishery has been completed. The final report for that investigation is posted the Bureau of Reclamation's web site (www.lc.usbr.gov with links to the Salton Sea. Also, the California Department of Fish and game is initiating selected monitoring of the sport fishery through the following actions:

- A 5 to 10 year creel census program that will provide information on catch per unit of effort, age, size and length data determined from fish sampled and comparative data relative to fishing methods and locations.

- Limited field sampling to determine where young of the year fish are and their abundance.

Duplication of effort relative to Department of Fish and Game monitoring is to be avoided and to the extent feasible to facilitate data compatibility, collaboration is expected relative to standardization of sampling methods and data collection. Further, it is expected that the investigations funded by this RFP will take full advantage of findings from the reconnaissance studies and will not duplicate those efforts.

GOALS

The purpose for these investigations are to address management needs associated with the Salton Sea Restoration Project that result in the following goals:

- Develop baselines against which changes in the conditions/status (i.e., age structure, growth rates, recruitment) of the fishery of the Salton Sea can be assessed. These baselines must be sufficiently rigorous to account for seasonal and annual variability associated with populations of orange mouth corvina, sargo, gulf croaker and tilapia.

Evaluations of disease, pesticide burdens, cause of fish kills and similar impact types of evaluations are not part of this project.

- Develop/identify indices for time-sensitive detection of changes in the condition/status of the primary fish populations of the Salton Sea.

- Develop a population model(s) for the primary fish species of the Salton Sea for the purpose of evaluating the potential for sustainable commercial harvest of tilapia, and perhaps gulf croaker.

- Document the distribution of critical habitat associated with the life cycle needs of the primary fish species of the Salton Sea. Critical is defined as habitat conditions that will cause significant negative impacts for the species if that habitat is not available at the appropriate stage of the life cycle/time of year.

PRODUCTS

The scope, time for completion and importance of the information being gained from this project results in different types of product needs that fall within three different categories.

Informal Products. The contractor is expected to provide a continuum of informal status reports through meetings with the Science Office and others, preliminary progress reports and through consultations and other means. Data are to be accessible to the Restoration Project as information is obtained because the project cannot await the completion of investigations. Thus, there is a continuous interface, through the Science Office, between the investigators and Restoration Project management.

File Reports. Quarterly progress reports summarizing accomplishments and documenting problems and issues, including recommendations for adjustments in activities being undertaken, are expected as interim products. A final report is also a required product. To avoid duplication of effort that report may cite formal products already developed, such as scientific manuscripts accepted for publication. In addition, data generated by these investigations are to be deposited within the Salton Sea Database Program.

Formal Products. Scientific publications in the peer reviewed literature, models, maps and other documentation of findings covering the full scope of the RFP are expected.

ASSISTANCE PROVIDED BY THE SALTON SEA SCIENCE OFFICE

The Science Office will provide access to the data collected under previous investigations and link the investigators with the Salton Sea Database Program. The Science Office will also link the investigators with the California Department of Fish and Game sport fishery monitoring program and with other on-going science activities at the Salton Sea with relevance for the fishery investigations.

SUBMISSION OF PROPOSALS

The required proposal format is provided as Attachment A to this RFP. Three paper copies of each proposal and one electronic version on 3.25" IBM-formatted diskette (WordPerfect 6.1 or earlier or Microsoft Word for Windows 6.0) should be submitted by mail postmarked no later than September 21, 2001 to:

Dr. Douglas Barnum, Science Coordinator
Salton Sea Science Office
78-401 Highway 111, Suite R
La Quinta, CA 92253
Email: doug_barnum@usgs.gov

Written questions about this RFP will be accepted and will be addressed. A record of the questions and responses will be posted on the Salton Sea page of the U.S. Bureau of Reclamation's Lower Colorado River Region website:
http://www.lc.usbr.gov

CONTRACT OBLIGATIONS

Receipt of a funding award will obligate the contractor to the following:

- Adherence to established standards: The Science Office and the co-lead management agencies are committed to high quality science. As key inputs to the decision-making process, environmental data must be accurate and reliable. Therefore, each proposal is expected to contain a Quality Assurance statement briefly describing how the proposed approach will produce valid and high quality evaluations and how any limitations to the use of these data will be identified. All funded proposals will be required to produce an acceptable Quality Assurance Project Plan (QAPP). Additional guidance in preparation of the QA statement as well as the complete QAPP may be obtained from the QA coordinator:

  Barry H. Gump, Ph.D.
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  2555 East San Ramon Avenue M/S SB70
  Fresno, CA 93740-8034
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  or from EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5, October 1997 which is available on the internet at:
  http://www.epa.gov/quality1/qs-docs/g4-final.pdf

- Initiation of studies within 60 days of the contract award:
  Evaluations need to be initiated in a timely manner to maximize the amount of information that is available as soon as possible because of on-going needs for management decisions to be made. Therefore, contract awards obligate the investigators to initiate substantial efforts as soon as practical after receipt of a contract, but within 60 days.

- Submission of proposals is acknowledgement of a willingness to participate in "real-time" data and information sharing. This interchange will occur among Restoration Project investigators and between investigators and the Science Office and Restoration Project Management. Funded projects that do not comply with the spirit of this collaboration effort will be terminated.

- INSURANCE REQUIREMENTS: Insurance requirements will be determined by the funding source (see below). The following represent likely m*inimum* ***limits of insurance*****:** Contractor shall maintain limits no less than:

  General Liability*:* $1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

  Automobile Liability: $1,000,000 per accident for bodily injury and property damage. The Authority, its directors, officers, employees, agents and volunteers shall be covered as additional insured with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and the insurance coverage shall be primary insurance as respects the funding source/agency.

  Workers' Compensation and Employer's Liability*:* Workers' compensation limits as required by the Labor Code of the State of California. Employers Liability limits of $1,000,000 per accident for bodily injury or disease. The insurer shall agree to waive all rights of subrogation against the Authority, its directors, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy which arise from work performed by the contractor.

Legal Requirements

The following is a summary of legal requirements, which may impact your proposal and budget:

1) Buy American (Section 31.36 © (5) of 40 C.F.R. 31)
   In accordance with Section 215 of the Clean Water act (33 U.S.C. 1251 et seq.) and implementing EPA regulations, the contractor agrees that the contractor, subcontractors,

material suppliers and other suppliers in the performance of this contract will give preference to domestic materials.

2) Prevailing Wages
Proponents are advised that this contract may be classified as public work for purposes of the California Labor Code, which requires payment of prevailing wages. The successful proponent must comply with applicable provisions of state law.

3) Equal Opportunity and Utilization of Small, Minority, and Women's Business Enterprises in Procurement: Federal requirements regarding utilization of Small, Minority and Women's Business enterprises in procurements related to this proposal will be required. Potential contractors need to briefly describe what their good faith efforts will be towards awarding a fair share of any sub-contracts and procurements to Small Business (SBE), Minority Business (MBE), and Women's Business (WBE) Enterprises. All Salton Sea Authority contractors will be obligated to retain and report on all records documenting their MBE/WBE efforts. A fair share objective imposes an obligation on the recipient or contractor to exercise good faith efforts. Good faith efforts by a recipient or prime contractor mean efforts to attract and utilize SBEs. MBEs and WBEs, primarily through outreach, recruitment and race/gender neutral activities.

Because of the high visibility of the Salton Sea Restoration Project and the need for real-time information as it is being obtained, contract performance will be closely monitored:

- Investigators funded under this RFP are required to provide any significant findings to the Science Office through the project officer or directly to the Science Office as such findings are identified throughout the course of their evaluation.

- The Science Office reserves the right to redistribute to other contractors, for use in their studies before final reports are prepared by contractors, preliminary information resulting from the evaluations. In doing so, the findings will remain confidential within the project and the ability of the investigators to publish their results in the scientific literature will be protected.

A draft final report will be submitted to the Science Office for peer review. Peer review comments are to be fully considered by the contractor and resolved with the Science Office. Comments received from peer review are to be responded to within 30 days following their receipt from the Science Office. The report will not be considered final until accepted by the Science Office and is not to be release as a public document until that time. Ten copies of the final report are to be provided to the Science Office within 30 days following notification of report acceptance. The contactor will also provide a summary presentation at an open Science Office meeting to afford the opportunity for dialogue involving this subject area.

EVALUATION AND SELECTION OF PROPOSALS AND CONTRACT AWARD

Proposals are limited to the scope of work identified. That is, proposals that attempt to extend the scope of work beyond the establishment of baselines to cause and effect investigations or

extend the investigations beyond fish biology to evaluations of disease, burdens of environmental contamination and other areas of investigation will be considered non responsive to this RFP and will not be evaluated. Proposals may address all or only some of the goals identified. Submitters must clearly identify which goals are being addressed, how the investigations will address those goals and the specific types of data and products to be delivered.

Collaborative proposals involving a team of investigators are encouraged. However, that approach requires an integrated proposal with a lead principal investigator accountable for the project and product delivery, including the final report. Separate proposals for individual components of a collaborative proposal will not be evaluated. However, this does not preclude funding multiple investigators working as a team so long as the end-product is a single report addressing one or more specific goals as specified by this RFP.

The Science Office reserves the right to select the best segments from the various proposals received. If this occurs, those investigators selected may be asked to prepare a new integrated proposal incorporating the strategies of two or more proposals. Regardless of whether multiple proposals that address specific questions identified above or integrated proposals are selected, all investigators are required to participate in a single integrated effort relative to the fishery evaluations.

The evaluation process will take approximately 30 days. Contract awards will require an additional 30 to 45 days to provide funding to the successful submitters. The Science Office will perform an initial screening of each proposal for general compliance with this guidance and for relevance of the proposal. Relevance shall be evaluated using the following criteria:

1) Is the proposal responsive to the RFP, i.e., does it show understanding of the needs identified in the RFP?

2) Will the proposed approach provide information that significantly contributes to resolving the identified needs?

3) Is the general approach, including scope of coverage and duration of study consistent with the needs identified in the RFP?

4) Is an appropriate quality assurance statement included, i.e., is there a statement of intent to prepare an adequate QA program and plan to provide for adequate oversight of evaluations being developed in part by graduate students and/or investigators with limited work experience involving the subject matter?

The Science Office screening will be completed within 5 working days of the closing date for submission of proposals. Suitable proposals will then be reviewed in depth by at least two technical peer reviewers from outside the Science Office with no direct stake in investigations or remediation of the Salton Sea. Technical peer reviewers will score each proposal for:

1) Goals and objectives of the RFP relative to those of the RFP;

2) Demonstrated knowledge of the investigators relative to pertinent current literature;

3) Adequacy of the overall scientific approach;

4) Technical adequacy of methods, tools and data collection;

5) Anticipated outcomes and products;

6) Adequacy of work schedule, milestones, project duration, and level of effort;

7) Expertise of investigators in project area of study;

8) Quality/adequacy of facilities and equipment;

9) Adequacy of quality assurance plan.

Peer reviewers will be provided 30 days to complete their evaluations.

The Science Office will then consider the results of the technical peer reviews and develop recommendations to the co-lead management agencies based on:

1) Cost-- is the cost for the proposed evaluation reasonable relative to the products to be generated?

2) Multi-disciplinary approach--does the proposed study incorporate multi-disciplinary participation and approaches where such is warranted.

3) Reliability--does the proposal submitter have a proven history of timely project completion?

4) Timeliness--are the investigators able to substantially initiate studies within 60 days of the contract award.

Science Office evaluations will be completed within 5 working days of receipt of the peer reviews and recommendations forwarded to the co-lead management agencies. Funding decisions will be made in concert with those agencies. Funding will either be under the SSA, through federal or state appropriations/grants or by funding within the Science Office. The SSA will administer the contract in the first instances and the Science Office in the latter. The Science Office will oversee the technical performance of the contractor regardless of the funding source.

If this solicitation is amended then all terms and conditions that are not modified remain unchanged. The Science Office and the Authority reserve the right, at their sole discretion, to reject any or all proposal(s) received as a result of this request, to negotiate with any qualified

source, and to cancel in part or in its entirety this request for proposal. The receipt of proposals shall not in any way obligate the Science Office, the Authority, nor the Bureau of Reclamation to enter into a contract of any kind. Neither the Science Office, the Authority or the Bureau of Reclamation will be responsible in any manner for the costs associated or incurred with the preparation and submission of the proposals.

ATTACHMENT A: FORMAT FOR PROPOSALS

In general, proposals should be printed on 8.5 x 11 inch paper at 12-point font size with one inch margins. Clear, concise presentations of the case to conduct the proposed evaluations are sought. Unnecessarily elaborate proposals beyond those sufficient to present a complete and effective response to this RFP are not desired.

Proposers who include data which they do not want disclosed to the public must add the following statement to the title page:

> "This proposal includes data that shall not be disclosed outside the reviewing government agencies and their agents and shall not be duplicated or used, in whole or in part, for any purpose other than to evaluate this proposal. If however, a contract is awarded to this proposer as a result of, or in connection with, the submission of these data, the government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting agreement. This restriction does not limit the Science office's right to use information contained in these data if they are obtained from another source without restriction."

Each page of the proposal which contains data the proposer wished to restrict must be marked with the following legend:

> "Use or disclosure of data contained on this page is subject to the restriction on the title page of this proposal."

Title Page: Descriptive title of proposed study plus name and affiliation of principal investigator(s) and all contact information including mailing address(es), voice and fax phone numbers, and email address(es).

Summary: Brief description of proposed study.

Objectives: Specific accomplishments to be realized.

Narrative: The narrative should fully develop the approach to be undertaken. Investigators should demonstrate a knowledge of the broader relevant published literature and clearly describe a technical approach that is scientifically sound. Sufficient detail should be included such that moderately informed scientific peers can readily visualize how the evaluation will be done. A quality assurance statement is required.

Milestones and Products: This presentation should be specific enough to identify what products and general information will be available in what time frames.

Staffing: A table showing the proposed staffing, principal duties of each staff member, and the time allocation of all scientific staff must be included. Resumes should be provided for the principal investigator and all co-investigators and should be condensed by focusing on

education, recent positions, relevant experience and accomplishments, and recent and relevant publications that pertain to expertise in carrying out the proposed evaluation.

Experience: A list of projects completed by the submitting entity and/or principal investigators which demonstrates the ability to complete projects on a timely basis.

Facilities: The proposal should contain a description of the relevant facilities that provide the support base for the investigators evaluations. The description should be sufficiently detailed to allow the technical peer reviewers to determine adequacy with respect to accomplishing the proposed objectives.

Budget: A comprehensive budget covering all proposed activities must be included. The budget must, at a minimum, include the following elements identified for each year of investigation for the entire duration of the study:

1) Personal – by staff member;
2) Travel – separate travel for site visits from travel for other purposes;
3) Equipment – purchases and rental;
4) Supplies – major items or categories;
5) Contract services – itemize by purpose and subcontractor;
6) Indirect costs including overhead – Note: overhead costs can not exceed 26 percent for contracts issued by the Salton Sea Authority or the Salton Sea Science Office.
7) Other – substantial costs not included above.